

# Heart Defects in New Mexico: *Pulmonary Atresia*



Congenital heart defects (CHDs) are the most common type of birth defect. A child is said to have a CHD when he or she is born with a heart that is not formed normally. As medical care and treatment have advanced, babies with CHD are living longer and healthier lives.

## **What is New Mexico doing to catch heart defects early ?**

All birthing facilities in New Mexico are required to screen newborns for risk of heart defects, including congenital heart defects (CHDs), such as pulmonary atresia.\*

The screen for CHDs, called pulse oximetry, is painless and measures the baby's pulse and the level of oxygen in the baby's blood. Screening performed in the birthing facility before discharge allows immediate referral for follow-up testing. Pulse oximetry alone cannot diagnose a heart defect.

\*Parents choosing to forego this screening must sign a waiver.

## **What are the symptoms of a heart defect?**

It's important for parents and caregivers to be able to identify the symptoms of a heart defect. If you notice any of these symptoms, seek medical help immediately.

- Pounding heart
- Weak pulse
- Pale or blue-colored skin, nails, or lips
- Fast or troubled breathing
- Poor feeding
- Very sleepy

# Pulmonary Atresia

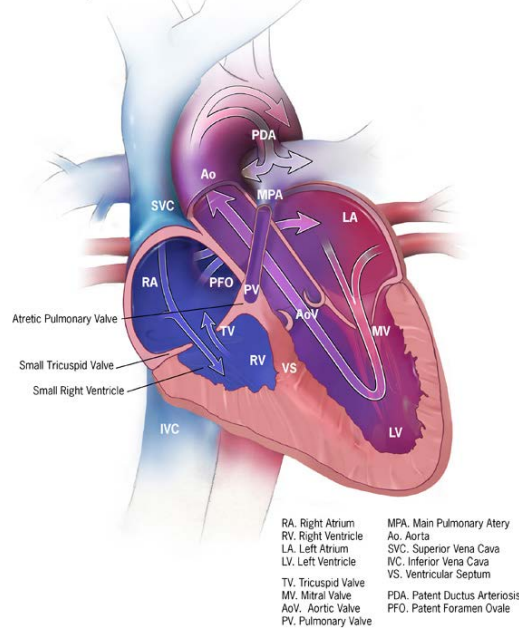
## What is pulmonary atresia?

Pulmonary atresia is a complex heart defect that is present at birth. Pulmonary atresia is a defect of the pulmonary valve which controls blood flow from the right ventricle to the main pulmonary artery (the artery that carries blood from the heart to the lungs). This defect prevents blood from directly flowing from the heart to the lungs, forcing blood to use other natural routes to get to the lungs.

There are two forms of pulmonary atresia. The first, pulmonary atresia with intact ventricular septum, occurs when the wall between the right and left ventricles remains intact. This leads to an underdeveloped right ventricle that is not able to perform its role as a pumping chamber leading to problems pumping blood to the lungs and body.

The second type of pulmonary atresia is when there is a ventricular septal defect which allows blood to flow in and out of the right ventricle. This form of pulmonary atresia is typically not as severe as pulmonary atresia with intact ventricular septum.

Pulmonary Atresia with Intact Ventricular Septum



Source: Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities: <https://www.cdc.gov/ncbddd/heartdefects/pulmonaryatresia.html>

## How is pulmonary atresia treated?

Each case of pulmonary atresia is different, so it is important to discuss treatment options with a pediatric cardiologist. Treatments may include medications or surgery. When it is necessary, surgery results in a very good quality of life for most children.

## How common is pulmonary atresia in New Mexico?

Pulmonary atresia is not common in New Mexico. There are 3-4 babies born each year with this condition in New Mexico.

## What can cause pulmonary atresia?

In most cases, the cause of heart defects are unknown. Some known causes include medical conditions of the mother such as diabetes, lupus, rubella infections, or obesity. Smoking, drinking alcohol, or taking certain medications can also increase the risk of a heart defect. Other known causes include alterations to the genes or chromosomes during the development of the fetus.